

## REMARKS/ARGUMENTS

### 1. Claim Amendments

Claims 1-2, 5-7, 9-22, 24-28, 30-34 and 36-38 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of any foregoing amendments and the following remarks.

### 2. Claim Rejections – 35 U.S.C. § 103 (a)

Claims 1, 2, 5-7, 9-17-22, 24-28, 30-34, and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purcell et al (5,598,514) in view of Nishino et al (5,237,424).

According to the Examiner, Purcell in Figures 1, 2, 5, 6 and 16-18, discloses a structure and method for a multi standard video encoder/decoder as specified in claims 1, 2, 5-7, 9-17, 19-22, 24-28, 30-34 and 36-38 of the present invention, the method, according to the Examiner, comprising:

receiving a block of current video data in a first format 201, wherein the block of current video data in the first format is a portion of a current flame (e.g. intra-frame); encoding the block of current video data using data stored in a second format 204; storing new data in the second format 205; and storing the encoded video data 103, wherein the stored data contains image data from a previous flame (Fig. 17).

The Examiner further states that although Purcell discloses the common MPEG format having chrominance and luminance data in an interleaved YCbCr 4:2:0 format (which, as noted below, is incorrect), Purcell differs from the present invention in that it fails to particularly disclose storing the data in such a format. According to the Examiner, Nishino, in Figures 1-4, illustrates the shuffling technique in which the interleaved chrominance C and luminance Y data are stored in one continuous memory block MB. Hence, according to the Examiner, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of Purcell and Nishino et al before him/her, to incorporate the well known data storage

process as taught by Nishino et al in the memory device 205 of Purcell et al in order to efficiently process video data. Applicant respectfully traverses the rejection.

Purcell does not describe an "interleaved YCbCr 4:2:0", but rather 4:2:2, which is conventionally known. In YCbCr 4:2:0, there are twice as many luminance samples as total number of chrominance samples in the two chrominance components. In a 4:2:2 format, the number of luminance samples is equal to the sum of the number of samples in the two chrominance components. In Figure 6B of Purcell there are 16 luminance samples (Y) and 8 + 8 chrominance samples (U and V) which means that the sub sampling format is 4:2:2. Hence, Purcell does not disclose an interleaved YCbCr 4:2:0.

Nishino does not overcome the deficiency of Purcell. First of all, it does not describe interleaving of samples or rows of samples but interleaving of blocks. The MB referred to by the Examiner as a *memory block* is actually referred to in Nishino as follows: A unit of the four blocks is called a *macro-block* (MB) (see col. 3, line 51 of Nishino). Second, the sub sampling format that is interleaved is, like Purcell, 4:2:2. Referring to Nishino, in Fig 4a signal B, it can be clearly seen that the number of luminance blocks (Y) are equal to the sum of the two chrominance block types (C1 and C2).

Further, even assuming that Purcell discloses YCbCr 4:2:0, which it does not, Purcell is not technically combinable with Nishino as the technology described in Nishino relates to the storage of video data on a magnetic tape using a rotary head type digital VTR, similar to what is used in digital DV camcorders. Nishino discusses storage techniques that are wholly inapplicable to the internal storage of video frames within a video encoder or video decoder as in Purcell.

## CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



Michael Cameron  
Registration No. 50,298

Date: July 1, 2008

Ericsson Inc.  
6300 Legacy Drive, M/S EVR 1-C-11  
Plano, Texas 75024

(972) 583-4145  
[mike.cameron@ericsson.com](mailto:mike.cameron@ericsson.com)